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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**In re Application of:**

Browning et al.

Serial No. 09/159,509

**Filed: September 23, 1998**

For: METHOD AND APPARATUS FOR  
CREATING A WIREFRAME AND  
POLYGON VIRTUAL WORLD

§ Group Art Unit: 2183  
§  
§ Examiner: Treat, William M.  
§  
§ Atty. Dkt. No.: 5181-11402

**CERTIFICATE OF TRANSMISSION**  
**37 C.F.R. § 1.8**

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office (Fax No. (571) 273-8300), on the date indicated below.

Robert C. Kowert  
Name of Registered Representative

September 7, 2006  
Date

Signature

### SUPPLEMENTAL REPLY BRIEF

**Mail Stop Appeal Brief - Patents**  
**Commissioner for Patents**  
**Washington D.C. 20231**

**Sir/Madam:**

In response to the Supplemental Examiner's Answer mailed July 7, 2006, Appellants present this Supplemental Reply Brief. Appellants respectfully request that this reply brief be entered pursuant to 37 C.F.R. § 41.41 and considered by the Board of Patent Appeals and Interferences.

**REPLY TO SUPPLEMENTAL EXAMINER'S ANSWER**

Subsequent to the remand by the Board of Patent Appeals and Interferences, the Examiner has withdrawn his rejection of claims 1-9, 56, 57, 69-83 and 105. The only pending rejection is the Examiner's recapture rule rejection of claims 10-46, 48-55, 58-68, 84-94, 97-104 and 106-108.

The Board of Patent Appeals and Interferences remanded this appeal to the Examiner for reconsideration in view of the precedential decision in *Ex Parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Inter. 2003). Appellants note that the arguments made in Appellants' original appeal brief filed October 9, 2001 and reply brief filed June 6, 2002 are entirely consistent with the *Eggert* decision. Accordingly, Appellants request the board to fully consider Appellants' arguments presented in the previous briefs.

On p. 5 of the Supplemental Examiner's Answer, the Examiner alleges three so-called "surrender-generating limitations" which the Examiner labels Limitation A, Limitation B and Limitation C. On pp. 9 and 11 of the Supplemental Examiner's Answer, the Examiner alleges that independent claims 10, 46, 58, 84, 97 and 102 do not include at least one of these three limitations or a broadened version thereof. First, as discussed in Appellant's previous briefs, the limitations listed by the Examiner are not surrender-generating limitations. As discussed in more detail below, the prosecution history of the original application reveals that the focus of Applicants' amendments and arguments was to distinguish from the cited art in terms of receiving and grouping representations of virtual objects as opposed to representations of information in a database, and grouping the representations of virtual objects into a group represented by a three-dimensional object. Appellants note that all of the independent claims in the present reissue application include these features. Thus, Appellants assert that the reissue application claims do not seek to recapture surrendered subject matter.

Second, the Examiner is plainly incorrect in stating that claims 10, 46, 58, 84 and 97 do not include at least one of these limitations A, B or C or a broadened version thereof. In regard to limitation A, each of claims 10, 46, 58, 84, 97 and 102 recite "virtual objects". In regard to limitation B, each of claims 10, 46, 58, 84, 97 and 102 recite a "selecting" function. And in regard to limitation C, each of claims 10, 46, 58, 84, 97 and 102 recite a "three-dimensional" grouped object. While claims 10, 46, 58, 84, 97 and 102 may not recite every word of limitations A, B and C listed by the Examiner, **this Board has rejected such a *per se* rule in *Ex Parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Inter. 2003) (precedential).** As stated in MPEP 1412.02.I.C:

[I]f the reissue claim recites a broader form of the key limitation added/argued during original prosecution to overcome an art rejection (and therefore not entirely removing that key limitation), then the reissue claim may not be rejected under the recapture doctrine. *Ex Parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Inter. 2003) (precedential). For example, if the key limitation added to overcome an art rejection was "an orange peel," and the reissue claim instead recites "a citrus fruit peel", the reissue claim may not be rejected on recapture grounds.

As shown above, there is no doubt that each of claims 10, 46, 58, 84, 97 and 102 recite at least a broader form of the Examiner's limitations A, B and C. Thus, the Examiner's assertion is simply not true.

At section C, pp. 5-6, of the Supplemental Examiner's Answer, the Examiner asserts that claim 10 does not contain the surrender-generating limitations of: "rotatable wireframe object", "rotatable sweep polygon" and "a grouped object comprising said first and second virtual objects joined at an intersection of the first and second edges". The Examiner's application of the recapture rule is improper, as explained in more detail below.

Claim 1 of the original application was amended twice during the original prosecution. In the first amendment of September 15, 1995, claim 1 was amended as follows:

1. (Amended) An apparatus for creating a virtual world data base, comprising:

receiving means for receiving a pictorial representation of objects in the virtual world; and

grouping means, coupled to the receiving means, for grouping descriptions of the pictorial representation of objects in the virtual world into selected groups of at least one of wireframe objects and polygon objects.

Accompanying this first amendment, Applicants argued that the Wexelblat reference was concerned with representations of data within an information system as opposed to virtual objects which are grouped into at least one of wireframe objects and polygon objects. See Amendment of September 15, 1995, pp. 5-6. In the Final Action of December 31, 1995, the Examiner maintained the rejection finding the amendment unpersuasive. Subsequently, on April 1, 1996, Applicants amended claim 1 a second time as follows:

1. (Twice Amended) An apparatus for creating a virtual world data base, comprising:

receiving means for receiving [a pictorial representation] first, second and third polygon representations of respective first second and third virtual objects in a [the] virtual world;

selecting means, coupled to said receiving means, for selecting a first edge of said first virtual object and for selecting a second edge of said second virtual object; and

grouping means, coupled to the receiving means and the selecting means, for grouping [descriptions of the pictorial representation of] said first and second virtual objects in the virtual world into a grouped object comprising said first and second virtual objects joined at an intersection of the first and second edges, the grouped object represented by [selected groups of] at least one of a three-dimensional and rotatable wireframe [objects] object and a three-dimensional and rotatable sweep polygon [objects].

On p. 8 of this second amendment, Applicants argued:

Wexelblat does not teach or suggest grouping three-dimensional and rotatable wireframe objects or sweep polygons. In fact, the Official Action has not pointed out any support for three-dimensional objects in Wexelblat at all. As shown in the figures of Wexelblat, all parts of the icons of the system are two-dimensional, as would be expected since the "icons... are connected so that they respond directly to either an information system condition or a variable within a simulation algorithm."

On page 10 of the second amendment, Applicants argued:

Although the Official Action correctly cites that Wexelblat discloses using

shapes and combinations of shapes, these are two-dimensional as shown in Figures 1-6 of Wexelblat. Further, there is no teaching or suggestion of using three-dimensional wireframe objects or sweep polygons in Wexelblat because Wexelblat seeks to provide a representation of a scalar value.

On pp. 10-12 of the second amendment, Applicants also repeated the argument from the first amendment that Wexelblat concerns representations of views of information ("database views") as opposed to virtual objects.

Thus, the prosecution history of the original application reveals that the focus of Applicants' amendments and arguments was to distinguish from the cited art in terms of receiving and grouping representations of virtual objects as opposed to representations of information in a database, and grouping the representations of virtual objects into a group represented by a three-dimensional object. Appellants note that all of the independent claims in the present reissue application include these features. Thus, Appellants assert that the reissue application claims do not seek to recapture surrendered subject matter.

The surrendered claim is represented by claim 1 prior to the amendment of April 1, 1996, which reads as follows:

1. An apparatus for creating a virtual world data base, comprising:  
receiving means for receiving a pictorial representation of objects in the virtual world; and  
grouping means, coupled to the receiving means, for grouping descriptions of the pictorial representation of objects in the virtual world into selected groups of at least one of wireframe objects and polygon objects.

Claim 10 of the reissue application reads as follows:

10. A method for creating a data base representing a virtual world, the method comprising:  
receiving a plurality of polygon representations of virtual objects;  
selecting first and second virtual objects from said plurality of polygon representations of virtual objects;  
grouping the first and second virtual objects into a three-dimensional grouped object;

assigning a grouping hierarchy for the first and second virtual objects, wherein the second virtual object is assigned as the child of the first virtual object; and  
calculating an orientation and position of the child object relative to the first virtual object.

Claim 10 of the reissue application is clearly materially narrower than the surrendered claim. As noted above, the prosecution history of the original application reveals that the focus of Applicants' amendments and arguments was to distinguish from the cited art in terms of receiving and grouping representations of virtual objects as opposed to representations of information in a database, and grouping the representations of virtual objects into a group represented by a three-dimensional object. The Examiner has complained that certain phrases from the original amendments are no longer present in claim 10. The Examiner is essentially requiring that every limitation added during the original prosecution be retained in its entirety. Such a *per se* rule was explicitly rejected by this Board in *Eggert*.

Appellants are clearly not attempting to recapture the surrendered claim. All of the independent claims of the present reissue application have been materially narrowed with respect to the surrendered claim. "[I]f the reissue claim is narrower in an aspect germane to the prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim." *In re Clement*, 45 USPQ2d 1161, 1165 (Fed. Cir. 1997). Claim 10 of the reissue application squarely falls within the case of being materially narrower than the surrendered claim in an aspect germane to the prior art rejection. For example, claim 10 has been materially narrowed by inclusion of the "three-dimensional" group limitation which was central to Applicant's argument during the original prosecution. Claim 10 is not broader than the surrendered claim in any aspect germane to the prior art rejection. The surrendered claim does recite "at least one of wireframe objects and polygon objects". However, claim 10 recites "receiving a plurality of polygon representations of virtual objects; selecting first and second virtual objects from said plurality of polygon representations of virtual objects; grouping the first and second virtual objects into a three-dimensional grouped object that the three dimensional

grouped object". Note that the surrendered claim referred to at least one of wireframe objects and polygon objects and reissue claim 10 still refers to polygon representations of virtual objects. Thus, claim 10 is not broader than the surrendered claim in any aspect germane to the prior art rejection. In the Amendment of September 15, 1995, Applicants argued that the Wexelblat reference was concerned with representations of data within an information system as opposed to virtual objects. The "at least one of wireframe objects and polygon objects" was added to the claim an example of virtual objects as opposed to representations of information in a database in the Wexelblat reference. Claim 10 of the reissue application still recites "polygon representations of virtual objects". Moreover, claim 10 has been materially narrowed from the surrendered claim in several ways (e.g., by inclusion of the "three-dimensional" group limitation). Thus, recapture does not apply. As stated in MPEP 1412.02.I.C:

[I]f the reissue claim recites a broader form of the key limitation added/argued during original prosecution to overcome an art rejection (and therefore not entirely removing that key limitation), then the reissue claim may not be rejected under the recapture doctrine. *Ex Parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Inter. 2003) (precedential). For example, if the key limitation added to overcome an art rejection was "an orange peel," and the reissue claim instead recites "a citrus fruit peel", the reissue claim may not be rejected on recapture grounds.

By referring to the absence of the limitations of: "rotatable wireframe object", "rotatable sweep polygon" and "a grouped object comprising said first and second virtual objects joined at an intersection of the first and second edges", the Examiner is still making the mistake of focusing on how the reissue claim is broader than the patent claim. When applying the recapture rule to determine if surrendered subject matter is now being claimed, the reissue application claims are compared to the surrendered claims (i.e. the claims prior to cancellation or amendment during the original prosecution), **not the patent claims**. *Hester Indus., Inc. v. Stein, Inc.*, 46 USPQ2d 1641, 1649 (Fed. Cir. 1998); *Clement*, 45 USPQ2d at 1164-65; *Ball*, 221 USPQ at 295-96; *In re Richman*, 161 USPQ 359, 362-63 (C.C.P.A. 1969) ("The question raised to whether the appealed claims are of the same scope as the cancelled claims, not whether they lack some specific recitation absent from the cancelled claims but included in the patent claims."). The Examiner is

essentially arguing for the *per se* rule that was expressly rejected in *Eggert*. The “rotatable wireframe object”, “rotatable sweep polygon” and “a grouped object comprising said first and second virtual objects joined at an intersection of the first and second edges” limitations were not part of the surrendered claim. Thus, the absence of those limitations from the reissue claim does not constitute a broadening of the surrendered claim. Moreover, the reissue claim is materially narrower than the surrendered claim in several ways (e.g., by inclusion of the “three-dimensional” group limitation). Thus, there is no recapture. *Ex Parte Eggert*, 67 USPQ2d 1716 (Bd. Pat. App. & Inter. 2003) (precedential)

The Examiner’s rejection of each of claims 46, 58, 84, 97 and 102 is similarly flawed. Each of these claims refers to virtual objects and three-dimensional grouped objects. Thus, all of these claims have been materially narrowed with respect to the surrendered claims so that recapture does not apply.

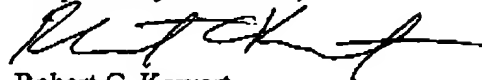


**CONCLUSION**

For the foregoing reasons, it is submitted that the Examiner's rejection of the pending claims was erroneous, and reversal of the Examiner's decision is respectfully requested.

No fee should be due; however, if any fee is due, the Commissioner is authorized to charge any such fee to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5181-11402/RCK.

Respectfully submitted,



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